

Amendments to the Claims: Please replace all prior versions and listings of claims with the following listing of claims.

LISTING OF CLAIMS:

1. (Currently Amended) A method for agent-based monitoring of network devices discovered in an enterprise network, comprising:

loading a plurality of agent templates corresponding to the discovered network devices, each of the agent templates associated with a class of network devices and comprising a hierarchical definition for that class of network devices;

selecting one of the discovered network devices from the enterprise network as a network device to be monitored, each the selected network device having a plurality of characteristics that include at least a class of the selected network device;

selecting one of [[a]] the plurality of agent templates based on one or more of the characteristics class of the selected network device, the selected agent template comprising a hierarchy of object classes, wherein each object class corresponds to a that defines possible combinations combination of the characteristics of for network devices in the class of the selected network device; and

instantiating an agent object from the object class of the agent template that corresponds to the characteristics of the selected network device, the instantiated agent object operable to monitor hardware characteristics of the selected network device.

2. (Currently Amended) The method of claim 1, wherein the characteristics of the selected network device further include at least one Management Information Base (MIB) parameter.

3. (Currently Amended) The method of claim 1, wherein the characteristics of the selected network device further include one or more of a type of network device, an identity of a vendor identity, a model number, a product line, or [[a]] the hardware characteristic characteristics.

4. (Currently Amended) The method of claim 1, wherein monitoring the hardware characteristics of the selected network device includes retrieving information associated with one or more of the monitored hardware characteristics of the selected network device.
5. (Currently Amended) The method of claim 4, wherein the monitored hardware characteristics of the selected network device include one or more of memory usage[:]; chassis temperature[:]; Central Processing Unit (CPU) usage[:]; fan status[:]; module status[:]; or power supply status.
6. (Currently Amended) The method of claim 4, wherein monitoring the hardware characteristics of the selected network device further includes comparing ~~a threshold value to~~ the retrieved information associated with ~~one or more of~~ the monitored hardware characteristics of the selected network device to a threshold value.
7. (Currently Amended) The method of claim 6, further comprising automatically communicating an alert in response to the ~~hardware characteristic~~ retrieved information violating the threshold value.
8. (Currently Amended) The method of claim 1, wherein the hierarchy of object classes for the selected agent template includes a network addressable unit class that defines the class of the selected network device and an agent level class that defines a root class, the agent level root class having a plurality of parent objects and at least one child object associated with each of the parent objects, the parent objects corresponding to different embodiments of a first characteristic of the network device and each child object being associated with different embodiments of a second characteristic and the embodiment of the first characteristic that corresponds to the parent clause declaration referencing object associated with the child object network addressable unit class.

9. (Currently Amended) A computer-readable medium ~~Software~~ comprising computer-executable instructions for agent-based monitoring of network devices discovered in an enterprise network, the computer-executable instructions stored on a machine the computer-readable medium, the software and operable when executed on a processor to:

load a plurality of agent templates corresponding to the discovered network devices, each of the agent templates associated with a class of network devices and comprising a hierarchical definition for that class of network devices;

select one of the network devices discovered in from the enterprise network as a network device to be monitored, each the selected network device having a plurality of characteristics that include at least a class of the selected network device;

select one of [[a]] the plurality of agent templates based on one or more of the characteristics class of the selected network device, the selected agent template comprising a hierarchy of object classes, wherein each object class corresponds to a that defines possible combination combinations of the characteristics of for network devices in the class of the selected network device; and

instantiate an agent object from the object class of the agent template that corresponds to the characteristics of the selected network device, the instantiated agent object operable to monitor hardware characteristics of the selected network device.

10. (Currently Amended) The computer-readable medium software of claim 9, wherein the characteristics of the selected network device further include at least one MIB parameter.

11. (Currently Amended) The computer-readable medium software of claim 9, wherein the characteristics of the selected network device further include one or more of ~~a type of network device, an identity of a vendor~~ identity, a model number, a product line, or [[a]] the hardware characteristic characteristics.

12. (Currently Amended) The computer-readable medium software of claim 9, wherein monitoring the hardware characteristics of the selected network device includes retrieving

information associated with one or more of the monitored hardware characteristics of the selected network device.

13. (Currently Amended) The computer-readable medium software of claim 12, wherein the monitored hardware characteristics of the selected network device ~~includes~~ include one or more of ~~[[:]]~~ memory usage~~[[:]]~~, chassis temperature~~[[:]]~~, Central Processing Unit (CPU) usage~~[[:]]~~, fan status~~[[:]]~~, module status~~[[:]]~~, or power supply status.

14. (Currently Amended) The computer-readable medium software of claim 12, wherein monitoring the hardware characteristics of the selected network device further includes comparing ~~a threshold value~~ the retrieved information associated with ~~at least one of the~~ monitored hardware characteristics of the selected network device to a threshold value.

15. (Currently Amended) The computer-readable medium software of claim 14, the computer-executable instructions further operable when executed to automatically communicate an alert in response to the ~~at least one of the hardware characteristics retrieved~~ information violating the threshold value.

16. (Currently Amended) The computer-readable medium software of claim 9, wherein the agent hierarchy of object classes for the selected agent template includes a network addressable unit class that defines the class of the selected network device and an agent level class that defines a root class, the agent level root class having a parent object and at least one child object, the parent clause declaration referencing object associated with the network device and each child associated with one of the hardware characteristics addressable unit class.

17. (Currently Amended) A system for agent-based monitoring of network devices discovered in an enterprise network, comprising:

memory operable to store information associated with a plurality of network devices discovered in the enterprise network, the information stored in the memory comprising a plurality characteristics of agent templates corresponding to the discovered network devices, each of the plurality agent templates associated with a class of network devices and comprising a hierarchical definition for that class of network devices; and

one or more processors collectively operable to:

select one of the network devices discovered in from the enterprise network as a network device to be monitored, the selected network device having a plurality of characteristics that include at least a class of the selected network device;

select one of ~~[[a]]~~ the plurality of agent templates based on ~~one or more of the characteristics~~ class of the selected network device, the selected agent template comprising a hierarchy of object classes, ~~wherein each object class corresponds to a~~ that defines possible ~~combination~~ combinations of the characteristics of for network devices in the class of the selected network device; and

instantiate an agent object from the object class of the agent template that corresponds to the characteristics of the selected network device, the instantiated agent object operable to monitor hardware characteristics of the selected network device.

18. (Currently Amended) The system of claim 17, wherein the characteristics of the selected network device further include at least one MIB parameter.

19. (Currently Amended) The system of claim 17, wherein the characteristics of the selected network device further include one or more of ~~a type of network device, an identity of a vendor~~ identity, a model number, a product line, or ~~[[a]] the hardware characteristic characteristics~~.

20. (Currently Amended) The system of claim 17, ~~wherein~~ the instantiated agent object ~~includes processors~~ operable to monitor the hardware characteristics of the selected network

device by retrieving ~~retrieve~~ information associated with one or more of the monitored hardware characteristics of the selected network device.

21. (Currently Amended) The system of claim 20, wherein the hardware characteristics of the network device include one or more of ~~off[(:)]~~ memory usage[(:)], chassis temperature[(:)], Central Processing Unit (CPU) usage[(:)], fan status[(:)], module status[(:)], or power supply status.

22. (Currently Amended) The system of claim 20, ~~wherein~~ the instantiated agent object further operable to monitor the hardware characteristics of the selected network device by comparing ~~compares a threshold value to the~~ retrieved information associated with ~~one or more of the~~ monitored hardware characteristics of the selected network device to a threshold value.

23. (Currently Amended) The system of claim 22, ~~wherein~~ the instantiated agent object further operable to automatically ~~communicates~~ communicate an alert in response to ~~one or more of the~~ retrieved information ~~hardware characteristics~~ violating the threshold value.

24. (Currently Amended) The system of claim 17, wherein the hierarchy of object classes for the selected agent template includes a network addressable unit class that defines the class of the selected network device and an agent level class that defines a root class, the agent level root class having a plurality parent objects and at least one child object associated with each of the parent objects, the parent objects corresponding to different embodiments of a first characteristic of the network device and each child object being associated with different embodiments of a second characteristic that corresponds to the parent clause declaration referencing object associated with the child object network addressable unit class.

25. (Currently Amended) A method for agent-based monitoring of switches discovered in an enterprise network, comprising:

loading a plurality of agent templates corresponding to the discovered switches, each of the agent templates associated with a class of switches and comprising a hierarchical definition for that class of switches;

selecting one of the switches discovered in from the enterprise network as a switch to be monitored, each the selected switch having a plurality of characteristics that include at least a class of the selected switch;

selecting one of [[a]] the plurality of agent templates based on one or more of the characteristics class of the selected switch, the selected agent template comprising a hierarchy of object classes, wherein each object class corresponds to a that defines possible combinations combination of the characteristics of for switches in the class of the selected network device switch; and

instantiating an agent object from the object class of the agent template that corresponds to the characteristics of the selected network device switch, the instantiated agent object operable to monitor hardware characteristics of the selected switch by retrieving information associated with one or more of the monitored hardware characteristics of the selected switch and comparing at least one of the retrieved information associated with the monitored hardware characteristics of the selected switch to a threshold value, and

automatically communicating an alert in response to the at least one of the hardware characteristics retrieved information violating the threshold value.

26. (Currently Amended) The method software of claim [[9]] 25, wherein the characteristics of the selected switch further include ~~comprising~~ one or more of[[:]] a device type; a device vendor identity,[[:]] a hardware characteristic; a model number[[; or]] a product line, or the hardware characteristics.

27. (Currently Amended) The method software of claim [[9]] 25, ~~the software further operable to~~ wherein selecting one of the plurality of agent templates includes:

~~transmitting transmit~~ using Simple Management Network Protocol (SNMP) a request for a Management Information Base (MIB) object from the selected ~~network device, wherein the MIB object identifies a type of the network device~~ switch; and

using the MIB object to identify the class of the selected switch in a class table containing a list of the discovered switches, wherein plurality of agent templates wherein the one of the plurality of selected agent templates is selected from template comprises a class definition for the class identified in the class table based on the type of the network device.

28. (New) The method of claim 25, wherein the hierarchy of object classes for the selected agent template includes a network addressable unit class that defines the class of the selected switch and an agent level class that defines a root class, the agent level root class having a parent clause declaration referencing the network addressable unit class.

29. (New) The method of claim 28, wherein the hierarchy of object classes for the selected agent template further includes one or more group level classes that define children of the agent level root class and one or more instance level classes that define the possible combinations of characteristics for the switches in the class of the selected switch, wherein the group level classes further define logical groupings for the instance level classes.

30. (New) The method of claim 8, wherein the hierarchy of object classes for the selected agent template further includes one or more group level classes that define children of the agent level root class and one or more instance level classes that define the possible combinations of characteristics for the network devices in the class of the selected network device, wherein the group level classes further define logical groupings for the instance level classes.

31. (New) The computer-readable medium of claim 16, wherein the hierarchy of object classes for the selected agent template further includes one or more group level classes that define children of the agent level root class and one or more instance level classes that define



the possible combinations of characteristics for the network devices in the class of the selected network device, wherein the group level classes further define logical groupings for the instance level classes.

32. (New) The system of claim 24, wherein the hierarchy of object classes for the selected agent template further includes one or more group level classes that define children of the agent level root class and one or more instance level classes that define the possible combinations of characteristics for the network devices in the class of the selected network device, wherein the group level classes further define logical groupings for the instance level classes.